

OKLAHOMA'S BENEFICIAL USE MONITORING PROGRAM (BUMP)

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Biographical Sketch of Authors

Mr. Porter, in his capacity as Streams/Rivers Monitoring Coordinator, manages all activities related stream and river monitoring for the WQPD. He is a member of several technical working groups whose activities include the development of the state's Use Support Assessment Protocols, the Continuing Planning Process, and statewide standard operating procedures. He also serves on several committees whose activities include the review and compilation of the state's 303(d) list and 305(b) report and the coordination of statewide monitoring activities. Mr. Belden, Mrs. Loucks, and Mrs. Ridgway are the WQPD's Ground Water Monitoring Coordinator, Lakes Monitoring Coordinator, and Volunteer Monitoring Coordinator, respectively.

Abstract

The BUMP, initiated in 1998, is Oklahoma's statewide water quality monitoring program. The program implements the criteria promulgated in the Oklahoma Water Quality Standards (OWQS) by utilizing the state's Use Support Assessment Protocols (USAP). The program's approach is holistic and includes a monitoring network encompassing surface and ground water as well as environmental education. The network was designed to provide comprehensive data that will document beneficial use impairments, identify impairment sources (if possible), detect water quality trends, provide needed information for the OWQS, facilitate the prioritization of pollution control activities, and provide environmental education. The program's permanent river/streams monitoring network has one hundred eleven (111) permanent stations (11 are inactive) and collects data statewide for various biological, chemical, and physical variables. By prioritizing waterbodies on the state's 303(d) list, one hundred ninety (190) rotating stations have been monitored on rivers and streams for a variety of pollutant causes and associated variables. Furthermore, one hundred thirty (130) lakes of over 100 surface acres have been identified for monitoring. From the fall of 1998 through the fall of 2001, one hundred seven lakes (107) were monitored quarterly for one year's time, and beginning in the fall of 2001, each lake will be monitored quarterly on a biannual basis. In 2001, groundwater monitoring was initiated with the primary goal of establishing a statewide permanent monitoring network on high-use, high vulnerability aquifers. The program also conducts annual compliance monitoring at over eight hundred (800) wells at licensed animal feeding operations. Lastly, Oklahoma Water Watch (OWW) provides environmental education resources and community monitoring opportunities to citizen groups and schools across Oklahoma. Assessments are made for all monitoring activities and compiled into an annual report. Staff has worked diligently to ensure the future longevity of the program. To ensure internal optimization, staff systematically revisits and updates the procedural and design aspects of the program. Additionally, inter- and intra-agency partnerships are continually cultivated and pursued.